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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,137	07/12/2005	Peter-Andre Redert	NL 030006	8348
24737 7590 12/19/2008 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510				
EXAMINER				
SINGH, SATWANT K				
ART UNIT		PAPER NUMBER		
2625				
MAIL DATE		DELIVERY MODE		
12/19/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/542,137

**Applicant(s)**

REDERT ET AL.

**Examiner**

SATWANT K. SINGH

**Art Unit**

2625

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. This office action is in response to the amendment filed on 16 September 2008.

***Response to Arguments***

2. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-10 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing (reference the May 15, 2008 memorandum issued by Deputy Commissioner for Patent Examining Policy, John J. Love, titled "Clarification of 'Processes' under 35 U.S.C. under 101"). The instant claims neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by

Baumberg et al. (US 2002/0186216).

7. Regarding Claim 1, Baumberg et al discloses a method for acquiring a substantially complete depth map from a 3-D scene with the steps of: a) acquiring partial depth map from said 3-D scene (generating data defining a 3D computer model of a subject object by processing depth maps) (page 2, paragraph [0047]), b) acquiring derivatives of depth information from said scene (vertices of the subject object by processing each depth map to generate a polyhedron (page 2, paragraph [0047]), c) extending said partial depth map by adding non-relevant information to said partial depth map, creating a pixel dense full depth map being spatially consistent with both said partial depth map and said derivatives of depth information (image of the subject object made up of plurality of pixels together with a depth value for each pixel) (page 2, paragraph [0050]).

8. Regarding Claim 2, Baumberg et al discloses a method, characterized in that said non-relevant information extending said depth map is calculated by maximizing a probability function containing said non-relevant information, said partial depth map and said derivatives of said depth map (3D point calculator) (page 3, paragraph [0058]).

9. Regarding Claim 3, Baumberg et al discloses a method, characterized in that said partial depth information and said derivatives of depth information is acquired by quantitative image processing (processing the input data) (page 3, paragraph [0054]).
10. Regarding Claim 4, Baumberg et al discloses a method, characterized in that said partial depth information is acquired by detecting a local amount of image texture, and determining depth from spatially high textured areas (surface texturer) (page 3, paragraphs [0061]-[0063]).
11. Regarding Claim 5, Baumberg et al discloses a method, characterized in that said partial depth information and said derivatives of depth information is acquired by qualitative image processing (polygon generator) (page 3, paragraph [0059]).
12. Regarding Claim 6, Baumberg et al discloses a method, characterized in that said partial depth information is acquired by object segmentation to determine objects within said image and by detecting the ordering of objects (segmenting each input depth map) (pages 2 and 3, paragraph [0051]).
13. Regarding Claim 7, Baumberg et al discloses a method, characterized in that human depth perception is modeled by depth sensors and that said pixel dense full depth map is calculated based on properties of said depth sensors (intrinsic parameters of the camera(s) which recorded the depth map images) (page 3, paragraph [0052]).
14. Regarding Claim 8, Baumberg et al discloses a method, characterized in that said pixel dense full depth map is calculated by perturbing pixel values not defined by said partial depth map and said derivatives of said depth map and minimizing said probability function (3D point calculator) (page 3, paragraph [0058]).

15. Regarding Claim 9, Baumberg et al discloses Integrated circuit providing image processing of still and/or motion images (camera calculator) (page 3, paragraph 0054)).
16. Regarding Claim 10, Baumberg et al discloses a method for use in consumer electronics, television and computer vision products (the camera(s) which recorded the depth map images) (page 3, paragraph [0052]).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SATWANT K. SINGH whose telephone number is (571)272-7468. The examiner can normally be reached on Monday thru Friday 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Edward L. Coles/  
Supervisory Patent Examiner, Art Unit 2625

/Satwant K. Singh/  
Examiner, Art Unit 2625

sks